

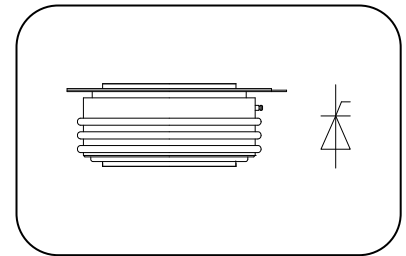
Features:

- Int erdigitated amplifying gates
- Fast turn-on and high di/dt
- Low switching losses
- Short turn-off time
- Hermetic metal cases with ceramic insulators

Typical Applications

- Ind uctive heating
- E lectronic welders
- S elf-commutated inverters
- AC motor speed control
- General power switching applications

$I_{T(AV)}$ **1010A**
 V_{DRM}/V_{RRM} **1200~1600V**
 t_q **18~36μs**
 I_{TSM} **11kA**



SYMBOL CHAR	ACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min T	ype	Max	
I _{T(AV)} Mean	on-state current	180° half sine wave 50Hz Double side cooled,	T _C =55°C			1010	A
			T _C =85°C			700	
			old model			600	
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V _{DRM} &V _{RRM} ,tp=10ms V _{DSM} &V _{RSM} = V _{DRM} &V _{RRM} +100V	125	1200		1600	V
I _{DRM} I _{RRM}	Repetitive peak off-state current Repetitive peak reverse current	V _D = V _{DRM} V _R = V _{RRM}	125			50	mA
I _{TSM} S	urge on-state current	10ms half sine wave	125			11	kA
I ² t I	² T for fusing coordination	V _R =0.6V _{RRM}				605	A ² s*10 ³
V _{TO} Th	reshold voltage		125			1.70	V
r _T	On-state slop resistance					0.48	mΩ
V _{TM} P	peak on-state voltage	I _{TM} =1800A, F=21kN	125			2.56	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM} 125				200	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} t o 1600A, Gate pulse t _r ≤0.5μs I _{GM} =1.5A	125			1500	A/μs
Q _{rr} R	ecovery charge	I _{TM} =1000A, tp=2000μs, di/dt=-60A/μs, V _R =50V	125	83		100	μC
t _q	Circuit commutated turn-off time	I _{TM} =800A, tp=1000μs, V _R =50V dv/dt=30V/μs , di/dt=-20A/μs	125	18		36	μs
I _{GT}	Gate trigger current			30		250	mA
V _{GT} Gate	trigger voltage	V _A =12V, I _A =1A 25		0.8		3.0	V
I _H H	olding current			20		400	mA
V _{GD} N	on-trigger gate voltage	V _{DM} =67%V _{DRM} 125		0.3			V
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 21kN				0.024	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.006	
F _m Moun	ting force			18		25	kN
T _{slg} S	tored temperature			-40		140	°C
W _t We	ight					3800	g
Outline	KT44cT						

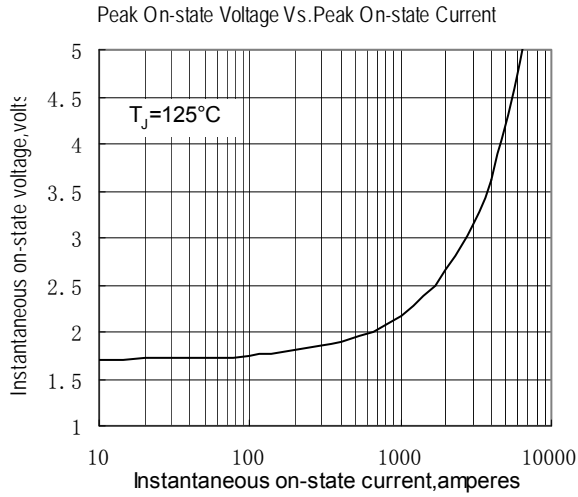


Fig.1

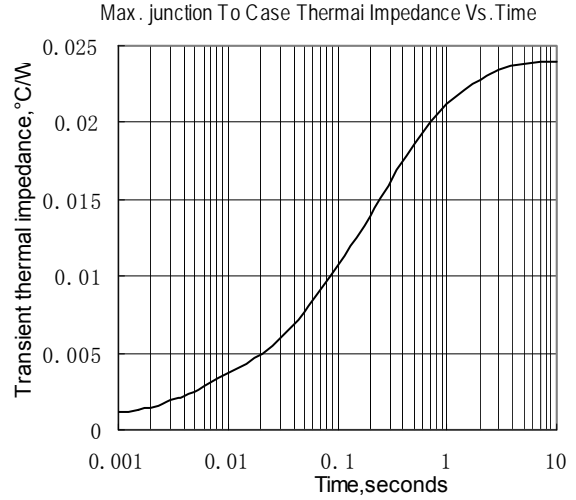


Fig.2

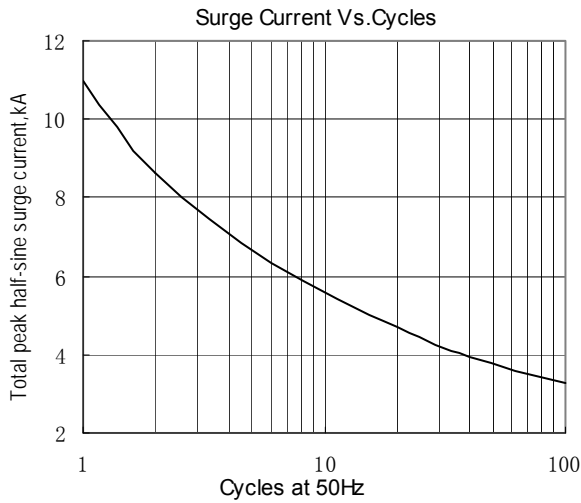


Fig.3

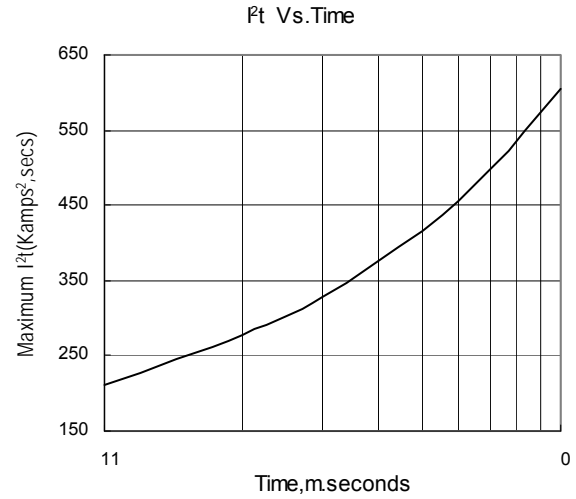


Fig.4

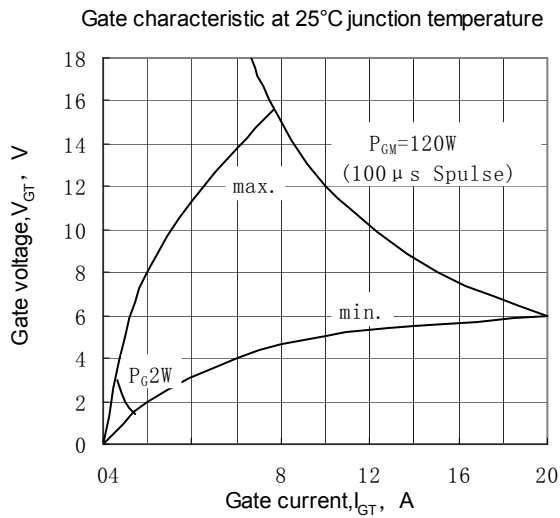


Fig.5

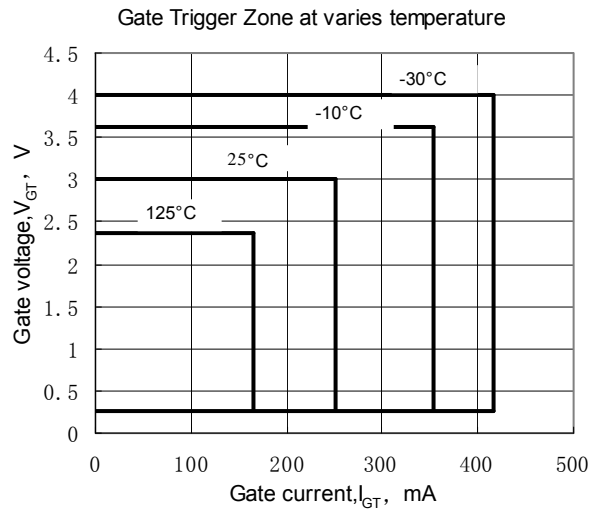


Fig.6

Outline:

